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Report No. 1

INTEGRATION OF INFORMATION FOR HOSPITAL RATE SETTING

VOLUME 7: INFORMATION AVAILABLE FOR RATE SETTING BY THE WASHINGTON STATE HOSPITAL COMMISSION

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VOLUME 7: INFORMATION AVAILABLE FOR RATE SETTING BY THE WASHINGTON STATE HOSPITAL COMMISSION

by

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PREFACE

This is one of a series of working papers in a project whose task is to explore the types of information required to permit equitable hospital rate setting, and the obstacles to its access, integration and use.

As part of the effort to identify the general scope of information required to establish hospital rates, analysis was made of the information presently employed in five different states: Arizona, Maryland, Massachusetts, New York and Washington. This report on Washington like those on the other states, was based on an examination of the various reporting forms employed and other background materials, together with interviews with officials both in the agency responsible for administering the rate setting program and in the hospital association.

The report attempts to cover the relation of the information collected to the program's particular objectives and rate setting process, the types of data available, and the history of how the reporting system was developed. The characteristics of the reporting system are described and illustrated in charts or exhibits. Problems of validating, managing and using the information are discussed. Finally an appraisal of the strengths and limitations of the information system is made according to criteria developed as part of this project and presented in the proceedings of its 1975 Conference on Uniform Reporting for Hospital Rate Reviews.

TABLE OF CONTENTS

LIST OF EXHIBITS

I. BACKGROUND

The Washington State Hospital Commission was established by the legislature under the provisions of Chapter 5, Laws of 1973, with the following stated purposes:

> . . .Promote the economic delivery of high quality and effective health care services. . .establish a hospital commission with authority over financial disclosure and budget and prospective rate review. . .assure all purchasers that total hospital costs are reasonably related to total services, that hospital rates are reasonably related related to aggregate costs, and that such rates are set equitably among purchasers of these services without undue discrimination.

The Commission, which is independent of any other governmental authority in the state, began operation in January 1974 and began to review and approve hospital prospective budgets for their fiscal years beginning on or after October 1, 1975.* As of January 1976 the budgets of 74 of Washington's 119 hospitals had been reviewed and approved.

At this time, only rates for self-pay patients, commercial insurance, Medical Service Bureaus and Workman's Compensation are controlled by the Commission. However, Washington is applying for funding under Section 222 of P.L. 92-603 to conduct a rate-setting experiment covering a subset of 30 to 40 hospitals. Should a contract be awarded, Medicare, Medicaid and Blue Cross would agree to accept the Commission's decisions to control their reimbursements to the hospitals in the experiment.

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* Washington's hospitals have fiscal years that begin in different months: about 60 percent begin in January; about 20 percent begin in June; and the balances are scattered throughout the rest of the year.

Program Objectives

The Commission's legal mandate to "promote the economic delivery of high quality and effective hospital and health care services" was an expression of the legislature's desire to control rising hospital costs. The Commission hopes to carry out this task by:

- promoting the regionalization concept, i.e., encouraging mergers and shared services;
- discouraging excess capacity - beds, equipment and staffing;
- encouraging alternatives to inpatient care;
- improving hospital productivity.

The specific goals of the program are as follows:

1) Meet the full financial requirements of hospitals.
2) Identify special hospital costs such as education, research, bad debts, Hill-Burton free care, shortfalls in reimbursement from third-party payers such as Medicare and Medicaid, cost of utilization and medical evaluation studies, etc., and to match projected costs with projected revenues for each cost center so as to eliminate hidden cross subsidies.
3) Construct productivity screens, based on performance standards, by which inefficiencies in hospital operation can be detected.
4) Encourage improved hospital management.
5) Use controls on hospitals' allowances for depreciation (by prescribing historical rather than price level depreciation), to restrict an institution's ability to make independent expansion and replacement decisions, but accompany this with a growth factor that the Commission can add to the bottom line of a hospital's budget if the institution's expansion plans fit community needs. (Such determinations are made by the Commission, at its discretion, but in close conjunction with planning agency reviews.)

The Commission approves hospital rates for each cost center following a budget review process. Staff recommendations on all aspects of rates are reviewed in public hearings before final rate orders are given by the Commission.

The budget reviews employ a complex exception system based on cost and productivity screens that compare the individual hospital with hospitals in a peer group. Currently, some 150 different indices are used, some departmental, some hospital-wide. Hospitals are assigned to peer groups according to a sophisticated classification system which takes account of both service complexity and the characteristics of the population in the hospital service area. The Commission may add to the rate a factor for growth and expansion at its discretion. Decisions are based on certificate-of-need approval status, and the results of staff consultations with planning agencies and cost impact studies.

The budget review system is still in the process of change and development. For example, the proposed SSA experiment would develop and test a system of budget apportionment based on total hospital budget instead of the present controls on revenues of individual cost centers.

Statutory Authority to Collect Data

The enabling law gives the Commission the authority to collect the data it requires to carry out its mandate and, as already noted, authorizes public disclosure of all reports from hospitals except privileged medical information. It was charged with establishing a uniform system of accounting and financial reporting, including such cost allocation methods as it prescribes, by which. . .[1]

> hospitals shall record their revenues, expenses, other income, other outlays, assets and liabilities, and units of service.

In establishing these accounting and reporting systems, furthermore, the Commission was required to take into account:

> . . .differences among hospitals according to size; financial structure; methods of payment for services; scope, type and method of providing services; and other pertinent distinguishing features.

II. TYPES OF DATA AVAILABLE

Three sets of documents describe and/or generate the basic elements of the information system. The uniform chart of accounts and the reporting system requirements are set forth in the Commission's Accounting and Reporting Manual for Hospitals and in its Budgeting and Prospective Rate Setting Manual. In addition, each hospital will submit monitoring and compliance reports four months after the close of its fiscal year comparing its actual costs, revenues, and volume with its budget for the period.

Besides the cost, revenue and service volume data flowing from its uniform financial reports, the Washington Commission uses a wide variety of other types of information in the course of its rate setting process. In this section we will note only the principal features of the financial information, which will be described in more detail later, and review more fully some of the other kinds of data the Commission employs.

Financial Data

During the first year of program operation for fiscal year 1976 hospitals furnished the Commission their costs, revenues and volumes of services for the current year and the projected rate year. The current year figures, displayed side by side with the hospital's budget projections, consisted of 6 months actual experience and 6 months estimates. Reports for the second program year will require three year entries--for prior year, current year and prospective year.

Direct expenses are reported for both revenue and non-revenue producing cost centers. Unassigned costs include depreciation, employee benefits, rental/lease costs, interest, etc. Other forms show expense reclassifications and cost allocations, revenues, capital budget and cash flow budget. Financial statements include balance sheets for restricted

and unrestricted funds, statement of revenues and expenses, and statement of changes in investment and fund balances. The nature and organization of these reports is described in Section IV to follow.

Physician Compensation

The budget report package requests detail on the hospital's contractual relations with physicians, as shown in Exhibit A, but the amounts of compensation are not reported. (By contrast, amounts of compensation for individual hospital administrators and/or assistant administrators are reported according to salary ranges, e.g., $15,000-$19,999, etc. Financial transactions of more than $10,000 with organizations of which hospital employees, Board members, or medical staff are officers or owners must also be reported.)

EXHIBIT A: FINANCIAL ARRANGEMENTS WITH PHYSICIANS

HOSPITAL _____ ADDRESS _____ BUDGET PERIOD FROM _____ TO _____

LICENSE NO. _____ ADMINISTRATOR _____ PHONE ( ) _____ DATE SUBMITTED _____

6.

Section 1181 references four general types of financial arrangements which exist between hospitals and hospital based physicians. Check the appropriate boxes below to indicate the type of financial arrangement which exists in your hospital for the various hospital departments having such arrangements. If none of the four types of financial arrangements described are appropriate, check the "Other" line and describe the arrangement in the space below. If the physician is salaried, check the "Salaried" line. For departments other than those named below, please complete the column heading.

(Section 1181) Financial Arrangement	HOSPITAL DEPARTMENT					
	Laboratory	Electro-diagnosis	Radiology	Nuclear Medicine	Emergency	Others (Specify)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Physician Separate Billing						
2. Physician Component Billing						
3. Hospital R/E						
4. Hospital Physician R/E						
Other						
Salaried						

COMMENTS: _____

_____

_____

Scope and Quality of Hospital Services

Various schedules included in the budget report package yield a great deal of detail on the scope of each hospital's service. The Commission is funded by the National Center for Health Statistics to manage the hospital facilities information component of its federal-state Cooperative Health Statistics System (CHSS). All the items on the CHSS prescribed minimum data set are included on the budget report forms, and considerably more as well. The data are shared with planning agencies. The Hospital Services Directory, included here as Exhibit B, shows the degree of detail at which special services are reported. The listing is used by the Commission to construct a Services Index for each hospital used as a variable in peer grouping assignment. The index weighs costs associated with each of 48 possible services. For example, on a scale of 1-5, Physical Therapy ranks 2.0; Burn Intensive Care ranks 5.0.

Many of the items on the schedule duplicate those of the A.H.A. Annual Survey and the state's licensing reports. While this duplication may be considered wasteful, these outside reports do not yield the necessary detail, or provide the data at the time needed. However, having multiple sources permits checks to be made on the consistency of hospital reporting. Major discrepancies are often discovered. For example, hospitals not infrequently report different bed complements to different agencies. While this may be due to different reporting definitions or report dates, the Commission needs to be able to check the accuracy of this data as directly reported to it since the number of beds constitutes the basic denominator for calculating unit costs of inpatient care.

The Commission also collects detailed data on the numbers and types of physician staff in each hospital, by specialty and by board certification status.

HOSPITAL BASED SERVICES*	Code
DAILY HOSPITAL SERVICES	
Coronary Intensive Care	
Pediatric Intensive Care	
Burn Intensive Care	
Medical Intensive Care	
Surgical Intensive Care	
Newborn Intensive Care	
Isolation Intensive Care	
Psychiatric Isolation Intensive Care	
Pulmonary Intensive Care	
Communicable Disease Isolation Care	
Protective Isolation Care	
Semi-Intensive Care	
Drug Abuse Care	
Alcoholism Care	
Inpatient Care Under Custody (Jail)	
Metabolic Care	
Newborn Nursery Care	
Mental Retarded Nursery Care	
Premature Nursery Care	
Stroke Care	
Neonatal Acute Care	
Post Partum Care	
Psychiatric Acute Care	
Pediatric Acute Care	
Geriatric Acute Care	
Medical Acute Care	
Surgical Acute Care	
Skilled Nursing/Extended Care	
Psychiatric Long-Term Care	
Tuberculosis Long-Term Care	
Intermediate Care	
Rehabilitation Care	
Residential/Congregate Care	
Mental Retardation Care	
Self Care	
PARTIAL DAY CARE	
Psychiatric Night Care	
Psychiatric Day Care	
HOME CARE SERVICES	
Home Physical Medicine Care	
Home Social Service Care	
Home Dialysis Training	
Jail Care	
Psychiatric Foster Home Care	
Home Nursing Care	
EMERGENCY SERVICES	
Emergency Room Service	
Ambulance Service	
Mobile Cardiac Care Service	
Psychiatric Emergency Service	
Emergency Observation Service	
E.R. Communications System	
Trauma Treatment E.R.	
Orthopedic Emergency Service	
Radioisotope Decontam. Room	
OTHER ANCILLARY SERVICES	
Delivery Room Services	
Labor Room Services	
Abortion Services	
Dental Surgery	
Podiatry Surgery	
Urologic Surgery	
Otolaryngologic Surgery	
Plastic Surgery	
Surgical Day Care (One Day)	
Gynecologic Surgery	
Kidney Transplant Services	
Open Heart Surgery Services	
Heart Cath/Sterile Room Services	
Cystoscopy Service	
Neurological Surgery	
Ophthalmologic Surgery	
Orthopedic Surgery	
Recovery Room	
Anesthesia Services--Surgical	
Anesthesia Services--OB	
Anatomic Pathologic Services	

HOSPITAL BASED SERVICES*	Code
OTHER ANCILLARY SERVICES (Cont'd)	
Hematological Services	
Clinical Chemistry Services	
Serologic Services	
Urinalysis Services	
Microbiologic Services	
Necropsy Services	
Pulmonary Lab Services	
Organ Bank	
Blood Bank	
Electroencephalography	
Electrocardiography	
Electromyography	
X-Ray Examination	
X-Ray Therapy	
Cobalt Therapy	
Radium Therapy	
Diagnostic Radioisotope	
Therapeutic Radioisotope	
Pharmacy W/FT Registered Pharmacist	
Pharmacy W/PT Registered Pharmacist	
Pharmacy Unit Dose System	
Pharmacy IV Additive Program	
Clinical Pharmacologic Services	
Psychopharmacological Therapy	
Shock Therapy	
Physical Therapy	
Occupational Therapy	
Speech Therapy	
Rehabilitation Therapy	
I.V. Therapy	
Psychiatric Therapy	
Clinical Psychologist Services	
Inhalation Therapy	
Blood Collection and Processing	
CLINIC SERVICES	
Cardiology	
Chest Medical	
Communicable Disease	
Dermatology	
Diabetes	
Allergy	
Metabolic	
Neurology	
Pediatric	
Neonatal	
Psychiatric	
Obstetrics	
Hypertension	
Rheumatic	
Renal	
Orthopedic	
Trauma Ortho	
Ophthamology	
Otolaryngology	
Podiatry	
Dental	
Alcoholism	
Child Diagnosis	
Child Treatment	
Drug Abuse	
Family Therapy	
Group Therapy	
OTHER SERVICES	
Toxicology/Antidrug Info	
Drug Reaction Info	
Cancer/Tumor Registry	
Family Planning	
Genetic Counseling	
Dietetic Counseling	
Parent Training Class	
Diabetic Training Class	
Public Health Class	
Medical Research	

*Budget Year

To the author's knowledge, the report listed as Exhibit C represents the most complete roster of physician staff presently collected by any rate setting body. There is an incentive to report it completely, since the complexity of physician mix constitutes another of the factors used in classifying peer hospitals for purposes of budget screening.

Likewise, for the same purpose, considerable detail is requested on the numbers and types of education programs conducted in the hospital, and the numbers and types of interns and residents. Approval status is obtained from AMA data.

The hospital's accreditation status by the JCAS or AOA is reported and, again, taken into account in hospital classification. However, as in other programs, no reports from medical audits are available or planned.

Case Mix and Patient Characteristics

At present the Commission has no access to patient discharge abstract data to yield profiles on the case mix brought to different hospitals, procedures performed, etc. About 60 percent of hospital discharges in Washington are from hospitals that subscribe to the PAS system, but the reports do not go to the Commission. Planning for universal reporting of discharge abstract data is in a state of confusion. The Commission is trying to work with local PSRO's, but there appear to be conceptual obstacles to communication.

Data for Rate Adjustments Related to Hospital Expansions: The Growth Factor

The budget report package calls for a narrative statement of the hospital's short and long term facilities and program expansion plans, and three year capital budget. The budget classifications are for land, building, fixed and movable equipment, and improvements, by department and according to projected year. Hospitals must rank items according

EXHIBIT C. PHYSICIAN STAFF

BUDGET PERIOD FROM _____ TO _____

HOSPITAL _____ ADDRESS _____

LICENSE NO. _____ ADMINISTRATOR _____ PHONE ( ) _____ DATE SUBMITTED _____

1a.

Line No.	CLINICAL SPECIALTY	*ACTIVE MEDICAL STAFF PROFILE MD's/DO's (ENTER NO.)						INTERN/RESIDENT PROFILE (ENTER NO.)			
		Hospital Based			Non-Hospital Based			Approved Programs			Other Residents
		Board Certified A	Board Eligible B	Other C	Board Certified D	Board Eligible E	Other F	Intern G	Extern H	Resident I	J
01	Family Practice										
02	General Practice										
03	OB/GYN										
04	Pediatrics										
05	Psychiatry										
06	Oncology										
07	General Surgery										
08	Neurosurgery										
09	Thoracic Surgery										
10	Urology										
11	Cardiovascular Surgery										
12	Plastic Surgery										
13	Orthopedic Surgery										
14	Vascular Surgery										
15	Oral Surgery										
16	Internal Medicine										
17	Cardiology										
18	Gastroenterology										
19	Neurology										
20	Ophthalmology										
21	Dermatology										
22	Endocrinology										
23	Hematology										
24	Anesthesiology										
25	Radiology										
26	Pathology										
27	Podiatry										
28	Dental										
20	TOTAL										

*Beginning of Budget Year.

to priority.

The narrative statement accompanying the budget, which asks for departmental as well as overall plans, is considered an important means of understanding the hospital's own perception of its mission. Both these documents are shared with staff of the Department of Social and Health Services (DSHS), which administers certificate of need determination in Washington. They are considered essential tools for developing both a long term regulatory strategy for encouraging regionalization of specialized services and for controlling excess capacity.* Exhibit D shows the worksheet backup for the Capital Budget summary.

Finally, both the Commission and the DSHS make use of hospital service area data gathered by the Washington-Alaska Regional Medical Program in patient origin studies conducted in 1967. In some areas the CHP-b agencies have updated these studies; even where they have not, the Commission finds that the service areas remain quite stable over time. This service area designation provides a base for many types of Commission and planning agency analyses required for decisions on appropriate standby resources and on appropriate expansion plans.

Demographic Data

In addition to the hospital service area data available to the Commission from external sources, its report forms request each hospital to describe what they consider to be the geographic area they serve, and to describe the characteristics of this population, e.g., age, income, etc. For its own analysis, in order to classify hospitals in peer groups,

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* The Commission requires that formal approval from the Department of Social and Health Services accompany any hospital requests for increased rates to support changes in facilities or services above prescribed dollar amounts, but it does not necessarily have to underwrite the operating costs of these approved expansions. As noted above, the Commission can exercise discretion as to the 'growth factor' it may decide to give any individual hospital.

EXHIBIT D: CAPITAL BUDGET SUMMARY WORKSHEET--FIRST YEAR

Hospital _____ Budget Period From _____ To _____

License No. _____

ITEM NO.	DESCRIPTION OF ITEM**	TYPE OF REQUEST							YEAR OF ACQUISITION (indicate month in proper column)					SUPPLIER RECOMMENDED	REF. NO.	ADM. APPROVAL/ REMARKS
		ADDITION	REPLACEMENT	IMPROVEMENT	PRIORITY*	QUANTITY	EACH	TOTAL	1975	1976	1977	1978	1979			
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																

*PRIORITY:

A--Urgent
B--Essential
C--Economically Desirable
D--Generally Desirable

**List in order of year and within that year priority disposals last.

REMARKS:

(a) _____

(b) _____

(c) _____

(d) _____

Commission analysts routinely collect from the U.S. Census and from other government reports the following information about the area in which each hospital is located:*

- median income (county)
- percent urban population
- percent population 65 years or over
- physicians per 1,000 population
- percent females of ages 15 to 44 years

Economic Trend Indicators

The Washington Commission does not use economic trend indicators in its rate setting method.

Other

An unusual feature of the Washington reporting system is that it calls for each hospital and each major hospital department to submit a written statement of specific management objectives to effect economies of operation during the coming year, together with a statement of the expected dollar savings. To monitor the follow-through, the hospital's next fiscal year budget report must contain statements of progress towards these objectives and dollar savings achieved.

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* In addition to these demographic variables, the Washington hospital classification method includes hospital beds per 1,000 population, and physicians per 1,000 population. The other variables employed are endogenous. They include: number of available beds; non-profit/profit; non-government/government; accreditation; service index; interns; residents; physician mix index; Medicare days/total inpatient days; Medicaid days/total inpatient days. All of this information can be derived or computed from data in the hospital's budget report. A cluster analysis is used to construct the classification system. See Exhibit H, p. 24.

Historical Data

The Commission began operations with no store of financial data from hospitals to draw upon. The fiscal 1976 budget forms had initially been designed to secure 1974 as well as 1975 financial and volume data from the hospitals. However, it became apparent that it would be impossible for hospitals to reconstruct their historical data accurately according to the new accounting and reporting requirements, so the plan was dropped.

In order to design the hospital groupings, the Commission circulated a questionnaire to hospitals in January, 1975 that yielded data for all the non-dollar endogenous variables. For example, almost all the items in schedules Exhibits B and C, now in the budget form, were included in the questionnaire. An accompanying description of the grouping system explained how the information they supplied would be used, making it clear that complete and accurate reporting of the questionnaire items would be to the hospital's advantage once the budget review process become implemented.

Monitoring Reports

No monitoring reports are planned during the year. The hospital's year-end report of actual costs and volumes has already been noted.

III. HOW THE REPORTS WERE DEVELOPED

The Washington uniform chart of accounts, reporting system and budget formats all borrow heavily from those developed by the California Hospital Association and the California Health Facilities Commission. The firm of Arthur Anderson was responsible for producing the manual, forms and instructions. During a fifteen month period of drafting, review and revision, the Commission encouraged active hospital participation. In particular, comments and suggestions were given in a systematic fashion by a Technical Advisory Committee to the Commission, composed largely of hospital administrators and financial officers, and an Ad Hoc Committee on Accounting, that included representatives of the major accounting firms, the Washington State Hospital Association, and the local chapter of the Hospital Financial Management Association. In addition, the Commission held numerous public hearings. These however, yielded few concrete suggestions.

Most of the hospital resource, manpower and utilization items on the 1975 questionnaire and subsequent budget forms were pretested in 1974 through a Commission questionnaire circulated to all hospitals in the state, relative to the period January 1 through December 31, 1973. The hospitals also supplied volume statistics, but were not asked for financial data.

A draft of the present budget forms, including cost and revenue reporting, was pretested in three hospitals during 1974 and early 1975. The results lent strength to arguments by the hospitals that the draft forms called for too detailed accounting breakdowns for the smaller hospitals. Various other problems were discovered. Consequently, the Commission modified a number of its reporting requirements for the first year (1975-76) to allow for a gradual phase-in of the new accounting and budgeting system. In particular, 46 of the state's 119 hospitals (those classified as basic service institutions in the Commission's grouping system), were allowed to combine a number of subaccounts in summary

accounts that better reflect their simpler service organization and staffing levels.

Introducing the New Budget Reporting System

The Commission conducted a series of one-day workshops throughout the state to explain the budget and rate review program and to introduce the major concepts underlying its new accounting and reporting system. These were followed by two-day workshops, conducted jointly by the Hospital Financial Management Association and the Commission, where hospital financial officers worked through the budgeting system using a case approach.

IV. CHARACTERISTICS OF THE BASIC REPORTING SYSTEM

Washington's uniform chart of accounts is presented in a manual distinguished by the clarity of its organization and presentation.* The accounting principles and concepts are set forth and the system of accounts described and illustrated in ample detail. The system requires that all hospitals report their cost and revenue functional transactions in the same manner. While functional accounting and reporting is required so as to permit the Commission to make its inter-hospital peer group comparisons in an equitable manner, in most cases this will not interfere with the individual hospital's need for responsibility accounting that permits it to introduce or maintain its own system of internal management control. Where incompatibilities exist, they can be reconciled through the Commission's prescribed methods for reclassifications. The attempt has been made to serve both the reviewers' and the hospitals' needs by a coding system that permits maximum flexibility.

The numerical coding system in the chart of accounts provides six digits. Four digits to the left of a decimal point identify primary

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* Major credit should go to the California designers of the prototype.

account classifications; the two digits to the right identify natural expense classifications (salaries and other expenses). The first digit of an account designates the financial statement classification, e.g., assets, operating expenses, non-operating revenue and expenses, etc. The second, third and fourth digits identify the hospital service centers to which both revenues and expenses are to be reported. Accounts titled in capital letters and with a fourth digit of 0 must be reported by all hospitals regardless of size.

The manual sets forth in some detail for each account and sub-account the particular function or activity to be embraced in each account, the reporting conventions to be followed in instances where confusion might arise, the standard unit of measure to be employed, and the source of the data to be reported. This is illustrated in Exhibit E.

EXHIBIT E: ILLUSTRATION OF ACCOUNT DESCRIPTION (ELECTRODIAGNOSIS)

7110 ELECTRODIAGNOSIS

Function

This department operates specialized equipment to record electromotive variations in actions of the heart muscle on an electrocardiograph for diagnosis of heart ailments; to record electrical potential variations on an electromyograph for diagnosis of muscular and nervous disorders, or the measuring of impulse frequencies and differences in electrical potential between various areas of the brain to obtain data for use in diagnosis of brain disorders. Additional activities may include, but are not limited to, the following:

> Escorting patients into treatment rooms; wheeling portable equipment to patient's bedside; explaining test procedures to patient; operating electrodiagnostic equipment; inspecting, testing, and maintaining special equipment; and attaching and removing electrodes from patient.

Description

This cost center contains the direct expenses incurred in performing electrodiagnostic examinations. Included as direct expenses are: salaries and wages, employee benefits, professional fees, supplies, purchased services, depreciation/rental/lease, other direct expenses, and transfers.

Standard Unit of Measure: Number of Procedures

An ECG, EMG or EEG procedure is defined as one examination of a patient regardless of the number of tracings.

Data Source

The number of procedures shall be an actual count maintained by the Electrodiagnosis department.

Source: Washington State Hospital Commission Accounting and Reporting Manual, 2420.2.

An appendix to the accounting and reporting manual has 18 pages of illustrations as to where to report particular costs and revenues. Exhibit F shows a portion of these illustrations for items beginning with the letter B.

EXHIBIT F: EXCERPT FROM ACCOUNT DISTRIBUTION INDEX

Item	Cost Center Title	Cost Center Code	Natural Classification Code	Natural Classification Title
Blades, surgical	(c)		.32	Surgical Supplies, general
Blanks	Laundry and Linen	8350	.43	Linen Bedding
Blood, for patients	Blood Banks	7100	.39	Other Medical Care Materials
Blood, for employees	Employee Benefits	8880	.19	Other Employee Benefits
Blood derivatives	Blood Banks	7100	.39	Other Medical Care Materials
Blood type tests, purchased	Laboratory	7070	.61	Purchased Services - Medical
Blow Bottles	(a)		.49	Other Non-Medical Supplies
Board Member Expenses	Hospital Admin.	8610		(k)
Bond Discount amortization	Interest - Other	8870	.86	Other Expenses

The manual also sets out in considerable detail the steps that the hospital should go through in developing its budget process. It takes the hospital through the exercise of developing its plans, forecasting the various units of services, and then projecting the various expenses. It next sets out in illustrated detail the methods to be used in reclassifications to the functional centers and the sequence to be used for cost finding. The rate-setting method is outlined, including the various steps in the process necessary to compile the capital budget, to forecast volumes, revenues and expenditures, and to prepare a cash budget.

The Budget Schedules

The budget package includes 182 pages of forms to be completed by each hospital - in a total of 44 schedules. Naturally, each hospital is required to complete only the schedules appropriate to its own operations, ie.., basic service hospitals fill out far fewer forms and report for fewer items than do medical centers. Exhibit G shows how the schedules are indexed, and the reporting period requirements.

EXHIBIT G: DESCRIPTION OF FORMS REQUIRED AND NUMBER, BY CATEGORY AND REPORTING PERIOD

		Report Year	
	Combined	Current Year	Budget Year
General Information (7 forms)			
Hospital Information	X		
Certification	X		
Hospital Plans and Objectives	X		
Departmental Objectives	X		
Statistical Recap (1 form)	X		
Budget Expenses (5 forms)			
Direct Expense Summary	X		
Departmental budgeted direct expenses	X		
Unassigned Costs (5 forms)			
Depreciation	X		
Rental/Lease Costs	X		
Insurance/License/Taxes	X		
Interest	X		
Employee Benefits	X		
Reclassification Expenses (9 forms)		X	X
Summary			
Depreciation			
Employee Benefits			
Central Supplies/Pharmacy			
Nursing Float/Central Transportation			
SNF/ICF		X	X
Hospital Based Physicians			
Recoveries			
Other			
Cost Finding (2 forms)			
Cost Allocation--Amount		X	X
Cost Allocation--Statistics		X	X
Rate Setting (4 forms)			
Revenue and Expense Summary		X	X
Departmental Revenue and Expense Summary		X	X
Departmental Revenue Statement (one for each revenue producing dept.)	X		

EXHIBIT G: DESCRIPTION OF FORMS REQUIRED AND NUMBER, BY CATEGORY AND REPORTING PERIOD (cont'd)

		Report Year	
	Combined	Current Year	Budget Year
Budget Revenues (5 forms)			
Reclassification Revenues	X		
Gross Revenue Summary	X		
Deductions from Revenues	X		
Other Operating Revenues	X		
Nonoperating Revenues and Expenses	X		
Capital Budget (1 form)	X		
Cash Flow Budget (1 form)	X		
Projected Financial Statements (4 forms)			
Balance Sheet--Unrestricted Funds	X		
Balance Sheet--Restricted Funds	X		
Statement of Revenues and Expenses	X		
Statement of Changes in Investment and Fund Balances	X		

Description of Worksheets for Budget Preparation

(not required to be submitted to Commission)

Budgeted Salaries and Wages--Dollars
Budgeted Salaries and Wages--Hours
Professional Fees Worksheet
Supply Budget Worksheet
Utility Budget Worksheet
Other Purchased Services Worksheet
Other Direct Expenses
Transfers

The Account Classifications

There are eight major classifications of accounts, as follows:

DAILY HOSPITAL SERVICES - 8 subcenters
ANCILLARY - 22 subcenters
RESEARCH - 0 subcenters
EDUCATION - 6 subcenters
GENERAL SERVICES - 5 subcenters
FISCAL SERVICES - 5 subcenters
ADMINISTRATIVE SERVICES - 13 subcenters
UNASSIGNED COSTS - 8 subcenters

These eight major accounts have sixty-seven possible subaccounts as specified above. Others can be added if the hospital so wishes.

The Natural Expense Categories

The nine major categories of natural expense include:

- salaries and wages
- employee benefits
- professional fees
- supplies
- purchased services/utilities
- purchased services/other
- depreciation/rental/lease
- other direct expenses
- transfers

In the salary and wage category 8 subcategories must be reported, including:

- management and supervision
- technician and specialist
- R.N.'s, L.P.N.'s, physicians
- non-physician medical practitioners
- non-work time (holidays, sick leave, etc.)

Statistical Units of Measure

The Washington Commission has tried to incorporate relative value scales as much as possible in measuring the workload of patient care services in ancillary departments. As will be seen in Exhibit H, some other measures are innovative; many are traditional.

EXHIBIT H: UNITS OF MEASURE

Daily Hospital Services	
(All eight subcenters)	Patient Days
Ancillary Services	
Labor and Delivery Room	Deliveries
Surgical Services	Minutes
Recovery Room	Minutes
Anesthesiology	Minutes
Central Services	Line items
Laboratory	R.V. Units
Pulmonary Function	R.V. Units
Blood Bank	Unit/Blood
Electrodiagnosis	Procedures
Radiology:	
Diagnostic	R.V. Units
Therapeutic	R.V. Units
Nuclear Medicine	R.V. Units
Pharmacy:	
Drugs and Other	Line items
Intravenous Therapy	Line items
Respiratory Therapy	Treatments
Dialysis	Hours
Physical Therapy	Treatments
Other Physical Medicine:	
Occupational Therapy	Patients
Speech Pathology	Patients
Recreational Therapy	Patients
Psychiatric Day Care	Visits
Ambulance	Occasions
Clinics	Visits
Home Health Services	Contacts

EXHIBIT H: UNITS OF MEASURE (cont'd)

Research	Gross Rev.
Education (All Types)	Participants
General Services	
Printing and Duplication	Reams
Dietary	Patient meals
Cafeteria	Meals
Laundry and Linen	Pounds
Social Services	Contacts
Central Transportation	# FTE's
Employee Housing	Square feet
Purchasing	Op. Purch.
Plant (all items)	Square feet
Housekeeping	Hours
Fiscal Services	
Accounting	Avg. # Employees
Communications	Avg. # Employees
Patient Accounts	Gross Revenues
Data Processing	Gross Revenues
Admitting	Admissions
Administrative Services	
Hospital Administration	Hospital FTE's
Public Relations	Hospital FTE's
Management Engineering	Hospital FTE's
Personnel	Hospital FTE's
Auxiliary Groups	Volunteer hours
Chaplaincy Service	Patient Days
Medical Library	Physicians
Medical Records	Admissions
Medical Staff	Physicians
Medical Care Evaluation	Admissions
Nursing Administration	Nurse FTE's
Nursing Float Personnel	Nurse FTE's
Inservice Education	Hours

EXHIBIT H: UNITS OF MEASURE (cont'd)

Unassigned Costs

Depreciation and Amortization	Square feet
Lease and Rentals	Square feet
Insurance-Professional Liability	Gross Revenue
Insurance - Other	Square feet
Licences and Taxes	Square feet
Interest-Working Capital	Gross Revenue
Interest - Other	Square feet
Employee Benefits	Hospital FTE's

V. VALIDATING, MANAGING AND USING THE INFORMATION

Since the budget and monitoring cost reports in Washington are so new, many aspects of quality checks and management are not yet settled.

Validation

When the hospital submits its budget package, or any other forms required by the Commission, the chief administrative officer and the chairman of the hospital's governing board must attest, in a signed statement, that the statements are true and correct. All forms then are subjected to desk checking and analysis by the Commission staff reviewers. During this first year of the program, as could be expected, many reporting errors have been discovered as hospitals accommodate to the new accounting and reporting systems. Desk reviews are to be supplemented by selective field audits. The year-end monitoring reports will be audited more fully; plans had not been fully developed as of the date of this writing.

Managing the Data

Hospitals submit their budget and cost reports directly to the Commission. A state data processing service center does the computer work and its staff participates in computer program design. At the present time, only selected data are being entered into the computer system, consistent with the Commission's budget screening requirements. Additional elements will be added as experience and application indicate, and as the needs of other potential users of the information become known.

The Commission is currently surveying planning agencies, hospitals and other state government agencies reponsible for aspects of hospital regulation to determine their interest in securing various types of reports and analyses from the Commission's evolving data base. The government agencies bring surveyed include the Departments of Social and Health Services, Audit, Labor and Industries, and the Insurance Commission.

Analytic Reports

The following analyses are now made routinely on each hospital under review:

1. Profile of the hospital in relation to its peer group (see Exhibit I).

2. Hospital trends from current to budget year in respect to average length of stay; percent occupancy; total admissions; total patient days; salaries and wages per FTE; deductions from revenue as percentage of rate setting revenue; and workload measures in 6 revenue centers (patient days in ICU, minutes in surgical service, radiology r.v. units, emergency room visits, etc.).

3. Ratio of revenue to expense for each daily hospital service and ancillary service revenue center.

4. Variance from peer group in deductions from revenue (contractual adjustments, bad debts and charitable services) as percentage total rate setting revenue.

EXHIBIT I: HOSPITAL PROFILE IN RELATION TO PEER GROUP

Hospital X-Memorial

Address _____

Effective Date of Budget _____

Date Received by Commission _____

1. Profile:

	Current Year	Budget Year
Available Beds	159	159
Licensed Beds	159	159

A.

Classification Information	Peer Group 4 Range	Average	Hospital
Non Profit/Profit	0	0	0
Non Gov't/Gov't	0 - 1	.16	1
Accredited	0 - 1	.95	1
Service Index	62.1 - 102.4	82.10	70.8
Interns	0	0	0
Residents	0	0	0
Physician Mix Index	10 - 23	17.0	16
Hosp. Beds/1,000 pop.	1.4 - 6.5	2.96	2.0
Physicians/1,000 pop.	.754 - 2.320	1.25	.754
Median Income (Pop.)	$6284 - $9746	$8080.68	9746
Percent Urban (Pop.)	44.2 - 92.5	69.75	71.6
Percent 65 years + (Pop.)	8.2 - 12.9	9.76	8.7

5. Variance from peer group in financial status: ratio of income for debt service to debt service; current ratio; quick ratio; total debt; accounts receivable ratio; days operating revenue in accounts receivable; operating rate of return; earning power as percentage; leverage.

The Commission plans eventually to subject hospital budgets to three levels of automated exception review screens. During the first program year, however, computer reports are being generated only for the primary screen; the remaining analyses, when needed, are performed manually.

The primary screens are shown in Exhibit J, using the same actual example hospital as in Exhibit I. When exceptions are identified, in the primary screen, further analyses are conducted in secondary screening. These consist of 6 productivity variables for the hospital as a whole, such as FTE's per patient day, and 26 analyses of revenue producing cost centers, such as ICU direct expense per patient day, surgical minutes per day per FTE, etc. The particular departments identified as exceptions by these secondary screens are looked at more finely through detailed screening variables. Analysis of the department is in relation to corresponding departments in the peer group hospitals. The computed variables in the detailed departmental screens as as follows:

- Salaries-Wages/Unit of Measure
- Salaries-Wages/FTE
- Salaries-Wages as % of total exp.
- Employee Benefits/Unit of Measure
- Employee Benefits/FTE
- Professional Fees as % of total exp.
- Supply Exp./Unit of Measure
- Depreciation Exp./Unit of Measure
- Allocated Expenses/Unit of Measure
- Allocated Exp. as % of total exp.

Performing such analyses manually for the 1976 fiscal year reviews is an herioc undertaking. However, it is enabling the Commission staff to identify the particular types of analyses that appear to be most productive so that the automation of future reports can proceed selectively.

EXHIBIT J: ILLUSTRATION OF PRIMARY SCREENING ANALYSIS

Hospital X-Memorial

City _____

	Peer Group 4			Hospital Budget			
		Range					
	Median	Low	High	Variable Amount	Variance From Median	Percentile of Peer Group	Exception
PRIMARY SCREENING VARIABLES							
Total exp./Admission	1,027.09	815.63	1,196.36	960.37	- 66.72	39	
Change BY/CY**	+ 16.2	+ 7.6	+ 27.6	+ 18.7	+ 2.5	68	*
Total exp./Patient Day	205.60	143.51	245.48	198.23	- 7.37	43	
% Change, BY/CY	+ 16.0	+ 6.2	+ 35.3	+ 7.0	- 9.0	7	
Daily hosp. srvc. exp./Adm.	513.57	362.25	578.58	434.74	- 78.83	29	
% Change, BY/CY	+ 15.1	+ 7.9	+ 43.0	+ 16.8	+ 1.7	71	*
Daily hosp. srvc. exp./Patient Day	99.27	80.17	121.73	89.73	- 9.54	29	
% Change, BY/CY	+ 14.4	+ 3.8	+ 42.4	+ 4.5	- 9.9	7	
Ancillary exp./Admission	401.49	310.53	479.56	399.11	- 2.38	39	
% Change, BY/CY	+ 20.1	- 1.8	+ 27.7	+ 19.3	- 0.8	44	
Ancillary exp./Patient Day	82.32	48.81	96.94	82.38	+ .06	56	*
% Change, BY/CY	+ 13.6	+ 1.2	+ 36.0	+ 6.8	- 6.8	17	
Other Exp./Adm.	333.92	222.91	426.77	338.50	+ 4.58	54	*
% Change, BY/CY	+ 15.1	+ 5.8	+ 23.0	+ 16.1	+ 1.0	68	*
Other exp./Patient Day	69.82	35.03	81.80	69.87	+ .05	54	*
% Change, BY/CY	+ 15.8	+ 3.9	+ 26.6	+ 3.9	- 11.9	7	
Growth & Develop./Admission	49.94	0	76.08	7.28	- 42.66	14	
Growth & Develop./Patient Day	9.56	0	19.48	1.50	- 8.06	14	
Growth & Develop. as %/total exp.	4.7	0	7.9	0.8	- 3.9	14	

* Denotes out-of-line variable, will go to secondary screening analysis.

** BY: Budget Year, CY: Current Year

VI. APPRAISAL OF PRESENT INFORMATION SYSTEM

Because the Washington Budget review system had only been in full operation for six months at the time of this writing and because the Commission has every intention of making changes in the information system in light of experience, any evaluation must be extremely tentative. It would, however, be remiss to forego comment on the Washington information system entirely since it represents the most advanced effort to assemble detailed information from hospitals for the purpose of achieving equity in rate setting, and encouraging accountability from hospital managers.

Relation of Information to Program Objectives

Although the accounting and reporting systems in Washington borrowed heavily from the systems developed by the California Commission, it was revised to meet the local program objectives, and appears to serve them well.

Data is reported that shows differences among hospitals for the various independent and computed variables the Commission uses to classify hospitals into peer groups and to conduct budget screening. The system provides a means to match revenues and direct expenses for each prescribed functional cost center identifying cross subsidies. In addition, by relating utilization rates in each cost center to costs of manpower and supplies in these centers, it provides the means to construct productivity screens. Improved hospital management is encouraged both through the budget process itself, by the requirement of explicit statements of management objectives and by giving hospitals administrators, for the first time, reports that allow them to compare their institution's performance to that of peer hospitals. The reporting system, furthermore, involves department heads both in the forecasting and control of operations.

The full financial requirements objective is advanced by the reports that identify the extent to which different payers reimburse hospitals

either over or under their actual costs, permitting the Commission to compute contractual and bad debt allowances.

Finally, the budget reports yield considerable information on which to base decisions on the Commission's discretionary Hospital Growth Factor, i.e., the addition to the rate to support necessary replacements and/or facility and program expansions. The information on hospitals' three-year capital budgets, their detailed departmental plans for changes in services and the utilization levels of their existing services and facilities is particularly valuable since it can be related to defined hospital service areas and to the characteristics of populations served. While certificate of need approvals are given by another agency, the cost impact information received from the Commission feeds into the decision-making process.

Special Strengths and Weaknesses of the Information System

As we have seen, the information system supports the pursuit of the program's major objectives, displaying disparities among major providers of hospital care in respect to unit costs, displaying failures of payors to meet the hospital's financial requirements, and providing a factual basis on which long-term regional planning of hospital services can go forward. However, the central issue that the system presents is whether the enormous amount of detail called for in the cost/budget package is cost beneficial. It is too early to tell. To conform to the new reporting requirement many hospitals need to make organizational changes, set up procedures to acquire new statistics, re-program their computers or acquire new ones, hold in-house seminars for department managers and absorb increased workload in fiscal management and other areas. The Commission estimates that the costs of changing to the new system amount to about $5,000 per hospital. However, for the most part, this is a one time effort. Informed observers from the hospital association and elsewhere believe that the benefits to be derived from transferring to the new system, particularly those that allow new capabilities for internal hospital management, will over the span of a few years more than justify the initial outlays.

It also remains to be seen whether the Commission and its staff will have the time and develop the methodology to make use of the wealth of data they collect. The experience so far suggests that Washington is far ahead of other rate setting bodies in its analytic capabilities.

The Washington Commission is also notable in its intention to share the information it collects with other users, and in its efforts to learn the information needs of these users. Sharing of data with planning agencies is already routine practice, and augurs well as a step towards forging mutually reinforcing reimbursement and planning controls. The data system for PSRO's, and the PSRO structure itself, has not been finally established as of the date of this report; thus, one cannot foresee how links between reimbursement and the monitoring of patient care management may eventually be forged.

Exhibit K summarizes certain general observations on positive and negative features of the Washington information system in line with the criteria developed for the June, 1975 conference: Issues in Uniform Reporting for Hospital Rate Review.[2]

EXHIBIT K: SOME POSITIVE AND NEGATIVE FEATURES OF THE WASHINGTON STATE INFORMATION SYSTEM

Strengths	Limitations
- Information collected is shared with other users. The Commission's role as manager of the hospital facilities component in the NCHS-CHSS system encourages such sharing.	- Much of the general information about hospitals is already being reported separately to the licensing division of the state Department of Social and Health Services. However, these reports are not geared to serve the Commission's purposes.

Strengths	Limitations
- Besides hospital volume, expenditure and revenue, current and projected, the Commission assembles considerable detail on differences in hospital capabilities for rendering different types of service products, e.g., nature and scope of daily services and ancillaries, number and mix of specialities, board certification status of physicians.	- The lack of a historical base of financial data now prevents any long-term trend analyses.
- Relative value scales are used wherever possible in reporting utilization of ancillary services	- As in all other current rate setting programs, the "patient day" remains the unit of measure for daily hospital services.
- The variables used in classifying hospitals into comparison groups take account of such indicators of hospital product, as well as gross measures of quality (JCAH certification status).	- The Commission lacks (and would like eventually to add) more types of information to relate differences in cost to differences in patient care inputs and outcomes namely: - case mix profiles; - patient care requirement profiles; - medical audit results. Lack of such data impairs ability to make "productivity" comparisons in patient care services.
- The hospital peer groups take account of differences for the characteristics of the populations that hospitals serve.	
- The cost/budget reports are organized to display departmental inefficiencies in respect to: - low volumes in relation to bed and staffing capabilities; - failure to adjust variable and semi-variable salary and supply expenditures to underutilized capacities.	- To accomplish such displays requires painstaking accounting and reporting of detailed functions at the department level and has called for changes in accustomed coding. The changes may be accompanied by recording and reporting errors.

Strengths	Limitations
- failure to establish management objectives to overcome such sources of inefficiency by reducing beds, moving towards shared services, adopting flexible staffing methods, etc.	
- Excessive lengths of stay are not a problem in Washington, where PAS averages are the lowest of any state in the Continental U.S.	- There is at present no way of identifying inappropriate hospitalizations - e.g., in-patient diagnosis and treatment that could be carried out equally well on an ambulatory basis through home care, day care, or in a long-term facility.
- The contractual arrangements with hospital-based physicians are revealed in the reports and are subject to public disclosure.	- A ruling of the state Attorney General limits disclosure of amounts of physician's compensation.
- Future moves to control hospital costs occasioned by unwarranted changes in facilities are furthered by the hospital's goals statements, their three-year capital budgets and their prioritized future and overall plans accompanied by budgeted direct expenses by cost centers.	
- The Commission's ability to use group norms equitably derived as a basis for initial rate discussions (and eventually as a basis for developing performance standards) is furthered by the uniform system that yields reports according to functional activity centers, rather than the hospital's own responsibility centers.	- Performance standards are difficult to establish in the absence of patient-based data to show differences in case-mix patient care requirements and quality measures.

Strengths	Limitations
- The Commission's goal to set rates that will meet the total financial requirements of the hospital is furthered by the cost/budget reports isolation of the revenue shortfalls fom the hospitals' various payers- non-allowable costs, bad debts, etc.	- The extent of contractual allowances and bad debts are difficult to predict for the future rate year since they depend on unforeseeable shifts of patients from one payment source to another, and changes in reimbursement principles.

- Improved hospital management and control is furthered by:
  - the exercise of budgeting itself (the level of budgeting sophistication in most Washington hospitals has been very low);
  - overall and departmental accountability is encouraged by requiring hospitals to state their management objectives, to propose means to overcome existing inefficiencies, and to explain why they were unable to achieve these objectives during the budget year.
	- Many changes in management style, communication and process are demanded by the budget reporting system. Is too much being asked for at once? Will the system achieve the changes the Commission seeks, or will hospitals simply learn to satisfice.

- Unusually clear and specific instructions to hospitals are spelled out in the various manuals and case illustrative materials. Training programs geared to the particular are offered. This should enhance the accuracy with which the data are reported and reclassified to the required functional accounts.	- Training sessions are directed at administrators and financial officers of hospitals, they do not reach the department heads. Up to now, insufficient attention has been paid to training in the accurate recording and reporting of units of measure.
- The budget reports are subject to routine desk review, and to spot field audits on a selective basis.	- Budget for auditing staff is likely to be limited.
- Year-end cost monitoring reports will be subject to field audits.	

Plans to Change or Add to the Information System

During the first year, the Commission allowed hospitals a good deal of leeway in the amount of detail subaccounts that they were required to report. Over the next few years, as experience dictates, more of these detailed accounts will be reported. In addition, as already noted, the Commission hopes to acquire additional types of data, such as from the uniform hospital discharge abstract minimum set, that would allow it to factor in differences among hospitals in respect to case mix, types of operative procedures, etc. The Commission expects to develop an inflation index solely for monitoring purposes.

FOOTNOTES

1. State of Washington, Chapter 5 of the Laws of 1973, Section 11.

2. The criteria for the conference along with its proceedings have been published as: Uniform Reporting for Hospital Rate Reviews: Criteria to Guide Development and Proceedings of a 1975 Conference, by Katharine G. Bauer, under DHEW contract #600-75-0142, and may be obtained from the Office of Research and Statistics, Social Security Administration.